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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,057	10/28/2003	Hiroyuki Onoyama	031252	3826
23850	7590	02/28/2006	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			PARKER, FREDERICK JOHN	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/694,057		ONOHAMA ET AL.	
	Examiner		Art Unit	
		Frederick J. Parker	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/22/04;10/04/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1762

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-5 in the reply filed on 2-8-06 is acknowledged.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1,5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1762

- Claim 1 is vague and indefinite because in (1) it is unclear if the process requires a coating of the specified brightness L*, or must merely be capable of/ able to achieve L*.
- Claim 5 is vague and indefinite because the meaning of “modifier resins” is unclear, since it is unstated what is modified; for interpretation, any resin/s will be considered a “modifier resin” since the presence of any resin/s may modify the coating film properties, composition, adhesion, etc.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1,2,4,5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al US 2003/0194500.

Masuda teaches a method of applying a coating to a plastic substrate comprising coating the substrate with an aqueous primer which may contain a chlorinated polyolefin [0079-81], or other

Art Unit: 1762

resins (“modifier resins”) such as epoxies or urethanes [0016], and pigments including white pigments, per claims 4-5, capable of achieving the lightness limitation of step (1). When a reference discloses the limitations of a claim except for a property, and the Examiner cannot determine if the reference inherently possesses that property (in this case, the L^* value), the burden is shifted to Applicant/s, *In re Fitzgerald* 205 USPQ 594 and MPEP 2112. Water content appears to overlap the range of Applicants as calculated from [0016]. The applied primer is heated to a water content less than 30 wt%, which encompasses Applicants’ range of step (2), and hence encompasses the same electrical resistivities of claims 1-2, water inherently being conductive and therefore changes in water content would have resulted in changes in electrical resistivity, dependant upon residual water content remaining. Subsequent thermoset paint and clear coatings are applied thereon, with residual moisture (< 40 wt%) remaining (abstract, etc). The 3-layer coating is then baked. The base paint and clear coatings are applied electrostatically, and [0135] recognizes the conductivity (inversely related to resistivity) of the aqueous primer must be regulated, such as by mixing conductive carbon into the coating, to permit electrostatic coating. While the reference uses a conductivity additive to regulate conductivity/ resistivity prior to electrostatic coating, Applicants claims do not prohibit the inclusion of such additives in the primer coat, based upon the open-ended language of the claims. Regardless, overlapping water contents of coatings of the reference and claims would have necessarily produced similar electrical resistivity values.

Since both the primer layer and paint layer of Masuda contain pigments/ colorants, the method of Masuda is capable of achieving a Munsell lightness value of about 8.5 or more because manipulation of pigments to achieve a desired coloration is a matter of aesthetics or decoration

Art Unit: 1762

not otherwise effecting the process, and therefore does not impart patentability. Matters related to the choice of ornamentation producing no mechanical effect or advantage considered to constitute the invention are considered obvious and do not impart patentability, *In re Seid* 73 USPQ 431.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Masuda by optimizing the concept of electrical conductivity/resistivity of the aqueous primer coat to permit electrostatic application of subsequent coatings, and to apply colored paint and clear coats to achieve a desired coloration because such modifications would have been within the purview of one of ordinary skill in the art to produce a coating of desired coloration having excellent adhesion, moisture-resistance, and good appearance.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al US 2003/0194500 in view of DE 3916-948 (DE948).

Masuda et al is cited for the same reasons previously discussed, which are incorporated herein. Preheating the plastic substrate is not disclosed.

DE948 teaches that prior to coating plastic substrates, it is washed and dried at 50-60 C (overlapping the range of claim 3) prior to application of a primer coat. The subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made if the overlapping portion of the temperatures disclosed by the reference were selected because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Wortheim* 191 USPQ 90. It is the Examiner's position that it is notoriously well-known in the

Art Unit: 1762

coating art to clean/ wash and dry substrates prior to coating because dirt, grease/ oil, and other contaminants adversely effect adhesion of a subsequently applied coating. Thus, washing and drying a substrate prior to applying any coat would have been obvious, DE948 providing guidance as to the temperatures for drying plastic substrates, meeting the limitations of claim 3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Masuda by washing and drying the plastic substrate according to DE948 to provide the benefits of improving surface adhesion of subsequently applied coatings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

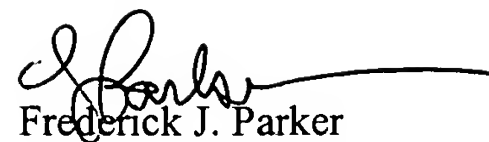
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/694,057

Page 7

Art Unit: 1762

A handwritten signature in black ink, appearing to read 'F. Parker', with a long horizontal flourish extending to the right.

Frederick J. Parker

Primary Examiner

Art Unit 1762

fjp